

ON A COLLECTION OF CENTIPEDS AND  
MILLIPEDS FROM COSTA RICA

BY RALPH V. CHAMBERLIN

The following lists are based on two small but valuable collections of centipeds and millipeds made during the years 1928, 1929 and 1930 at various points in Costa Rica by Prof. M. Valerio of San José, Costa Rica, by whom they were transmitted to me for identification. I am much indebted to Prof. Valerio for the care with which he has brought this material together and for his courtesy in turning it over to me for study.

The types of the new forms are in the author's collection.

## CHILOPODA

## ORYIDÆ

## 1. NOTIPHILIDES MAXIMILIANI (Humbert and Saussure)

*Notiphilus maximiliani* Humbert and Saussure, Rev. et Mag. Zool., 1870, sec. 2, vol. 22, p. 205.

*Locality*: San José. One specimen taken June 17, 1928. Previous Central American records are San Mateo in Costa Rica and Guatemala.

## CHILENOPHILIDÆ

## 2. SUTURODES TARDUS Chamberlin

Proc. U. S. Nat. Mus. 1922, vol. 60, art. 7, p. 14, pl. 2, fig. 5, pl. 3, figs. 2-4, and pl. 4 figs. 3-4.

*Locality*: Cervantes. One specimen taken June 20, 1929. Previously known from San Juan Pueblo in Honduras.

## CRYPTOPIDÆ

## 3. OTOCRYPTOPS FERRUGINEUS (Linnæus)

*Scolopendra ferruginea* Linn, Syst. Nat., ed. 12, p. 406, 1767.

*Locality*: La Caja, San José. One specimen taken by M. Valerio Dec. 13, 1929. Not previously recorded from Costa Rica.

## 4. OTOCRYPTOPS MELANOSTOMUS (Newport)

*Scolopocryptops melanostomus* Newport, Trans. Linn. Soc., 1845, vol. 19, p. 406.

*Locality*: Parismina. One adult specimen taken in 1929. Also two immature specimens from San José. Previously known in Central America from various points in Costa Rica, Guatemala, Honduras, and Nicaragua.

## OTOSTIGMIDÆ

## 5. OTOSTIGMUS SCABRICAUDUS (Humbert and Saussure)

*Branchiostoma scabricauda* Humbert & Saussure, Rev. et Mag. Zool. 1870, vol. 22, p. 203.

*Locality:* Costa Rica: San Isidro Coronado. One specimen taken May 4, 1929. This specimen lacks the anal legs and most of the anal segment, but seems, as judged from other parts, to be the species which was previously recorded from San Mateo and Cocos, Costa Rica. It also occurs in Brazil and Columbia.

## SCOLOPENDRIDÆ

## 6. SCOLOPENDRA VIRIDIS Say

Proc. Acad. Nat. Sci. Phil., 1821, p. 110.

*Locality:* Costa Rica: Salinas; San José. One specimen from each place taken by M. Valerio in 1929. This species is common from the southeastern United States to Central America. It was previously recorded in Costa Rica from Juan Viñas (P. P. Calvert) and Caché.

## GOSIBIIDÆ

*Gallitobius* Chamberlin, new genus

A genus of the family Gosibiidæ related to *Arenobius* and *Mexicobius*. From the former it differs in having the antennæ composed of numerous articles (in the genotype above 40) instead of being composed constantly of 20, and also in having the prosternal teeth numerous (e.g., 4+4 and 6+6) instead of 2+2; the ectal spine dentiform, very small. Margin of head not broken or interrupted. From *Mexicobius* it differs also in having the numerous prosternal teeth. The ninth, eleventh and thirteenth dorsal plates with posterior angles produced. Male not known.

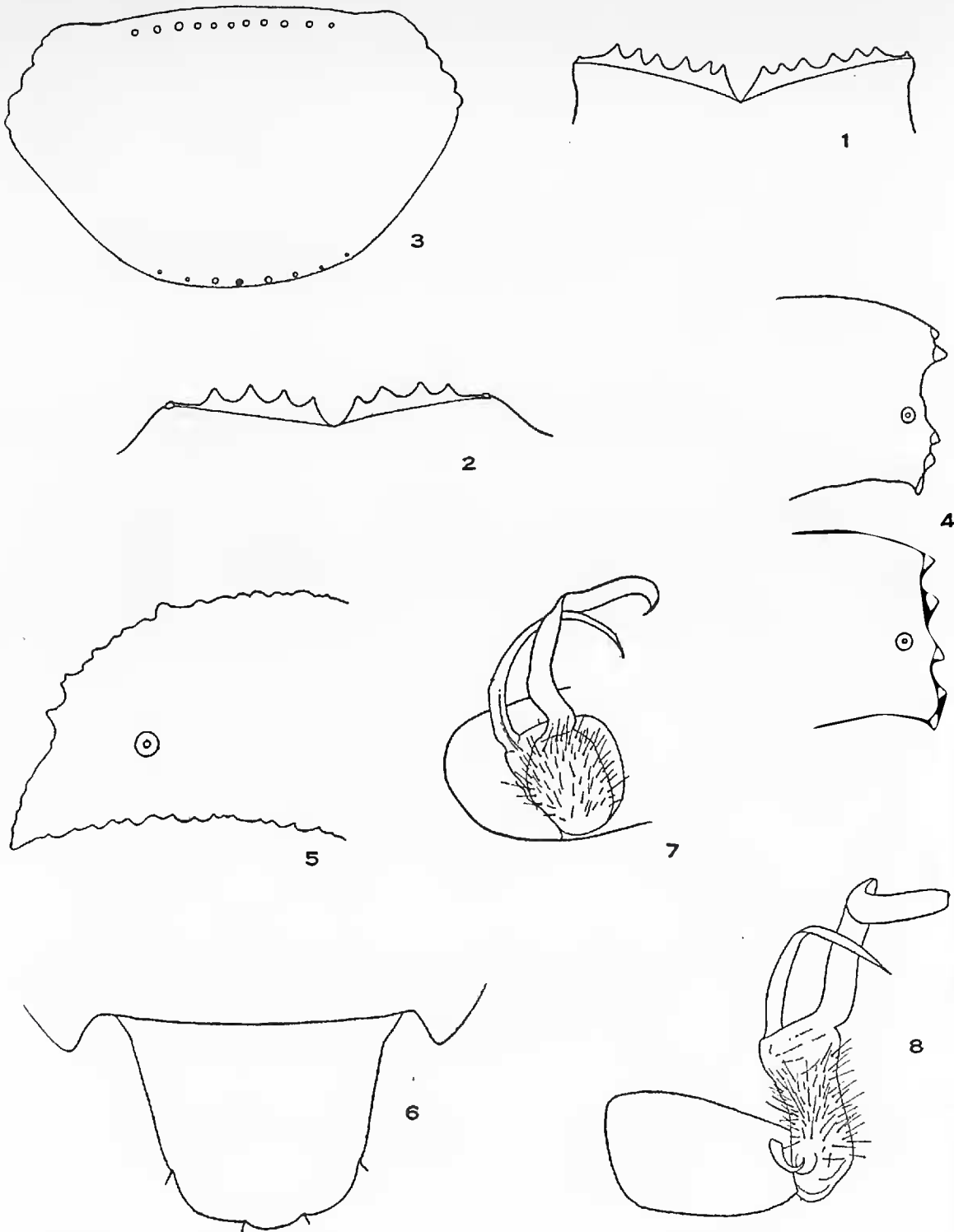
*Genotype.* *G. ethophor* Chamberlin, new species.

7. *Gallitobius ethophor* Chamberlin, n. sp.

Dorsum in general chestnut in color with a partly obscure median longitudinal darker stripe. Antennæ chestnut brown. Legs yellowish or somewhat brownish yellow, the posterior pairs darker.

Antennæ long; in the holotype composed of thirty-nine articles. Ocelli arranged in three series; e.g., 1 + 3,3,2; the single ocellus large, contiguous with the group, the first ocellus of the top series also notably enlarged.

Prosternum with anterior margin on each side nearly straight, transverse; teeth rather small, dark, in number 4 + 4; the ectal spine dentiform but low and almost obsolete, in line with the teeth. (See page 13, fig. 2.)



1, *Gallitobius ricanus*, n. sp., anterior border of prosternum showing teeth; 2, *Gallitobius ethophor*, n. sp., anterior prosternal margin and teeth; 3, *Nyssodesmus valerii*, n. sp., collum in outline; 4, same, fourth and fifth keels; 5, *Nyssodesmus albomarginis*, n. sp., fifteenth keel in outline; 6, *Seminelloxon chitarianus*, n. sp., anal tergite; 7, same, right gonopod of male, subventral view; 8, same, left gonopod, mesal view.

Coxal pores from circular to a little transversely elliptic, arranged thus: 7,6,6,6.

Anal legs armed below with 0,1,3,3,2 spines, above with 1,0,3,1,0; claws 2; coxa also armed laterally. Penult legs armed ventrally with 0,1,3,3,2 spines and dorsally with 0,0,3,2,0; claws 2; coxa apparently unspined. First legs bearing below 0,0,2,1,0 or 0,0,2,0,0 spines the inner (mesal) spine of the third joint very small.

Gonopods of the female with basal joint excavated within as usual; basal spines 3 + 3; claw strictly entire.

Length 26 mm.

*Locality*: El Gallito. One female taken Dec. 30, 1927.

### 8. *Gallitobius ricanus* Chamberlin, n. sp.

A much darker species than *G. ethophor*, the dorsum being a dark mahogany.

Antennæ composed of 43 - 44 articles. Lateral margin of head smooth without interruptions. Ocelli nine in number, arranged as follows: 1 + 2,2,3,1; the single ocellus very large and the caudal ocellus of top series almost as large, while the ocelli of the bottom series are very small.

Prosternal teeth 6 + 6. The ectal spine dentiform and much reduced or obsolete. (See page 13, fig. 1.)

Gonopods of female with basal joint strongly chitinized and excavated within at base. Basal spines 2 + 2. Claw entire.

Anal legs slender, bearing ventrally 0,1,3,3,2 spines and terminating in two claws. No spines detected on posterior coxæ but the poor condition of the type specimen renders full certainty as to this impossible.

Posterior angles of the ninth, eleventh and thirteenth dorsal plates produced strongly, those of the seventh also a little angularly produced. Surface of tergites strongly rugose.

Coxal pores circular, in a single series.

Length 22 mm.

*Locality*: El Gallito. One female in poor condition taken by M. Valerio, date not given.

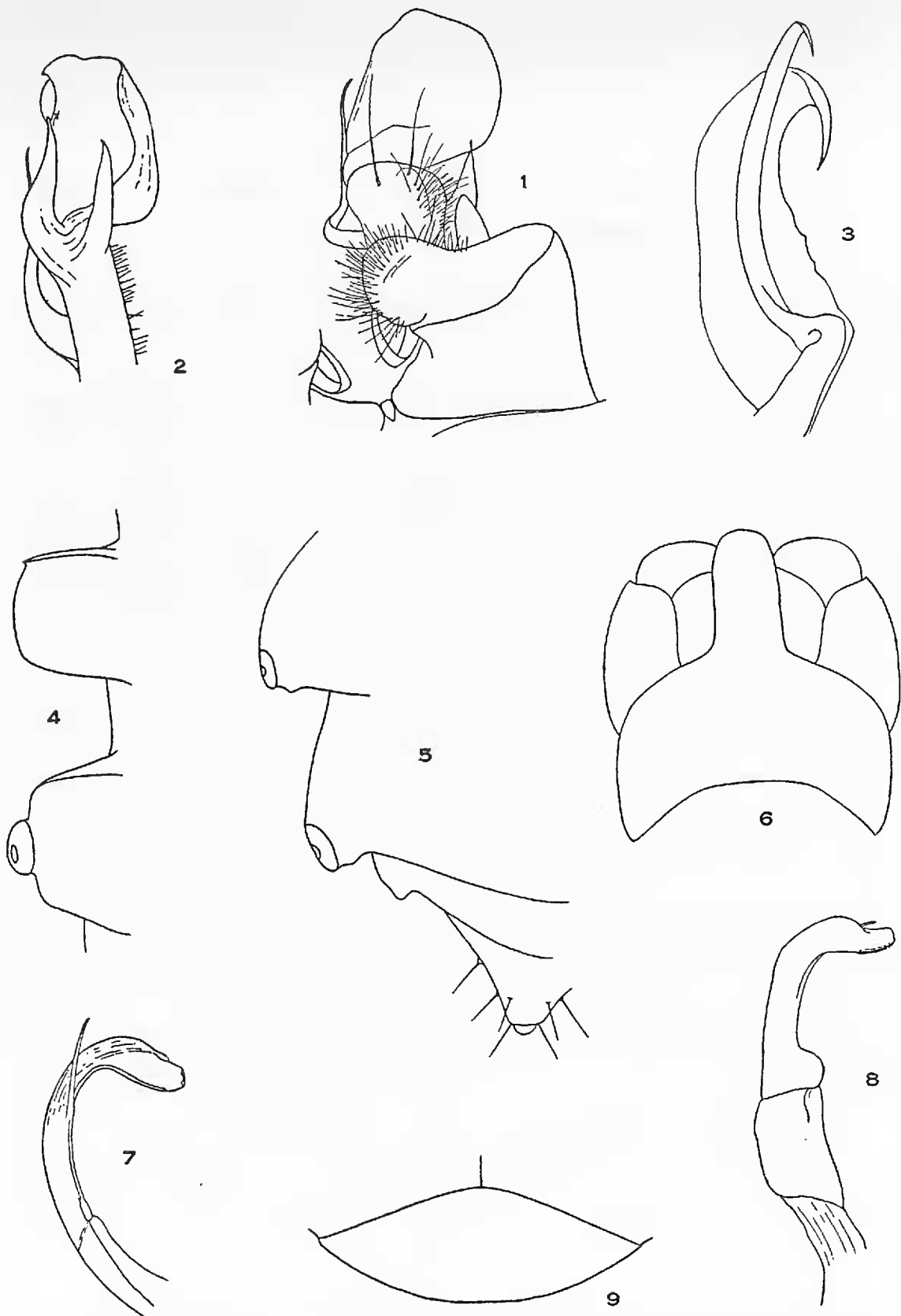
This species differs from *G. ethophor* especially in the more numerous prosternal teeth and in having the basal spines of the female genital forceps 2 + 2 instead of 3 + 3. It is a much darker species and has the posterior angles of the seventh tergite a little acutely produced which in *G. ethophor* is not the case.

## DIPLOPODA

### PLATYRRHACIDÆ

#### 9. *NYSSODESMUS BIVIRGATUS* (Carl)

*Platyrrhacus bivirgatus* Carl, Rev. Suisse Zool., 1902, 10, p. 652, pl. 11, fig. 65.



1, *Ethophallus cervantes*, n. sp., right gonopod of male, anterior view; 2, telopodite of left gonopod, caudal view; 3, *Chondrodesmus falciphallus*, n. sp., left gonopod of male, caudal view; 4, *Chondrodesmus euliotus*, n. sp., fourth and fifth keels; 5, same, posterior keels and anal tergite; 6, *Rhinocricus pygmoides*, n. sp., anterior gonopods, anterior view; 7, same, posterior gonopod, submedian view; 8, same, caudo-ectal face; 9, *Rhinocricus chitarianus*, n. sp., anal scale in outline.

*Locality:* Rio Jiminez. One broken specimen of small size taken Oct. 14, 1929. Previously taken in Costa Rica at San José (type locality), La Palma and Carrillo.

10. NYSSODESMUS sp.

*Locality:* El Gallito. One immature male taken Feb. 1, 1929.

11. *Nyssodesmus valerii* Chamberlin, n. sp.

The general color of the dorsum of this form is almost black, with the keels yellow excepting over base; lateral and ventral surfaces somewhat lighter, chocolate colored; legs and antennæ also chocolate brown.

Vertex of head bearing a seta each side of the well-developed median furrow; finely and evenly rugose except over clypeal region which is smooth. A series of seven short, spiniform setæ a little above lower median margin of labrum and two setæ at upper level of smooth area. Collum in outline as shown on page 13, fig. 3; its surface slightly roughened with densely arranged, but only little raised, smooth granules; a row of small tubercles across anterior border and a series of similar but more widely spaced tubercles along caudal border; two intermediate series of obsolete tubercles. The succeeding tergites with surface similar to that of collum, being vaguely roughened with smooth low granules visible only under the lens; a series of widely separated small tubercles revealed under the microscope along caudal border; the other series obsolete or absent. Keels somewhat longer antero-posteriorly than wide, with the general lateral margin parallel with axis of body and both corners well developed; anterior margin convex, the posterior margin concave, with the caudolateral corner acutely but only moderately produced; lateral margin of keels with four or five teeth, these on some of the porigerous keels separated into two groups by a wider, tooth-free, space or diastema. Pore far outside middle of keel, removed from lateral margin between teeth by from once to once and a half its diameter (inclusive of rim). (See page 13, fig. 4.)

Anal tergite comparatively short, semicircular, with sides at base straight for a short distance; surface nearly smooth excepting for the usual series of setæ. Anal valves and last sternite of the usual form, with setæ typical, the surface only very finely roughened.

Length of female (holotype), about 63 mm.; width, 12 mm.

*Locality:* La Palma, one female (holotype) collected Jan. 5, 1928, and La Carpintera, also one female taken Mar. 10, 1929.

12. *Nyssodesmus albomarginis* Chamberlin, n. sp.

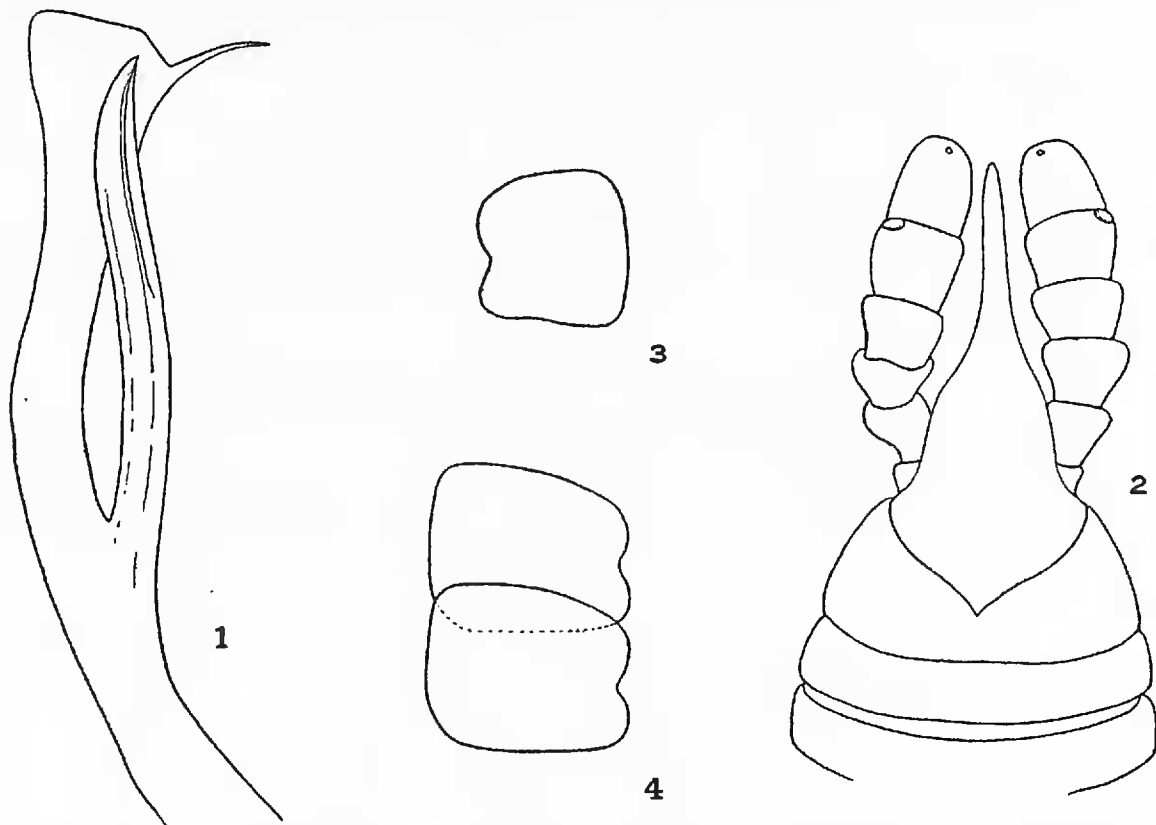
A species readily distinguishable from others of the region in having the keels bordered all the way around with white; the major tubercles across the posterior and the smaller ones of the

two more anterior rows also white; the collum white about the margins of the keels, with tubercles of anterior and posterior borders and of two intermediate rows also white; excepting for these white portions the body, together with legs and antennæ, is dark chocolate brown.

Head densely granular above becoming smooth in and toward labral region.

Tergites also with metazonites all densely finely granular, the prozonites smooth. Collum bearing a series of large tubercles, which tend to be divided, along caudal border and a series also along the anterior border, the tubercles of the two intermediate series smaller; a broad depression caudad of the anterior series, this depression extended caudad at middle. Antero-posterior length of keels much less than the width; anterior and lateral margins forming together an even convex curve; the caudal margin concave and meeting the lateral margin at an acute, projecting angle. The pore located outside the middle of keel, about one-third or a little more the distance from outer margin to base.

Anal tergite subquadrate, the sides straight and the caudal margin convex, with an indentation each side toward the well rounded corner; a series of four tubercles in a series a little in front of caudal border. Anal sternite convexly elevated anteriorly, subtrapeziform in outline; the caudal margin bearing the usual two



1, *Rhinocricus chitarianus*, n. sp., telopodite of gonopod of male, distal portion much enlarged; 2, *Siphonophora valerii*, n. sp., head and first segments, dorsal view, in outline; 3, same, pleurite of anterior region; 4, same, two pleurites of posterior region.

conspicuous setriferous tubercles between which the margin is straight. Anal valves sharply margined mesally, the elevated border smooth; also sharply furrowed within lateral margin, this margin and furrow straight.

Length of female (holotype), about 78 mm.; width, 16 mm.

*Locality:* La Palma. One female taken by M. Valerio Jan. 15, 1929.

#### EURYURIDÆ

##### 13. AMPLINUS CONVEXUS (Carl)

*Pachyurus convexus* Carl, Rev. Suisse Zool., 1902, vol. 10, p. 633, pl. 11, fig. 57.

*Locality:* Parismina. One specimen taken July 26, 1928. Previously taken in Costa Rica but recorded without more definite locality.

##### 14. AMPLINUS, sp. a.

*Locality:* Parismina. Two females taken July 26, 1928. These specimens are of a species notably smaller than *A. convexus*, but in the absence of males it seems unwise to describe them.

##### 15. AMPLINUS, sp. b.

*Locality:* Turrialba. One female taken June 24, 1928. Larger than the preceding form. Species doubtful.

##### 16. APHELIDESMUS CALVERTI Chamberlin

Trans. Am. Ent. Soc., 1914, 40, p. 191, pl. 2, figs. 6-8.

*Locality:* Parismina. One male and two females taken Feb. 26, 1928. Originally described from La Emilia (P. P. Calvert coll.).

##### 17. APHELIDESMUS INTERMEDIUS Chamberlin

Trans. Am. Ent. Soc., 1914, 40, p. 192.

*Locality:* San José. One male. The holotype, a female, was taken at La Emilia in 1909-1910 by Dr. P. P. Calvert.

##### 18. POLYLEPISCUS sp.

*Locality:* Parismina. One female taken July 26, 1928.

##### SEMINELLOGON Chamberlin, new genus

A genus related to *Aphelidesmus* but differing in having the telopodite of the male gonopods less complicated; the seminal style free, not accompanied by a sheath; principal lamina typically angularly bent distad of middle, the distal portion cycle-shaped and nearly at right angles to the basal portion. Dorsal plates wholly without tubercles or roughening; carinæ with lateral mar-



gins smooth, thickened, especially about the sunken pores. Last sternite (anal scale) semi-circular.

Genotype: *S. chitarianus* Chamberlin, new species.

### 19. *Seminelloxon chitarianus* Chamberlin, n. sp.

Dorsum laterally brown with a conspicuous broad yellow median stripe over the entire length, the stripe constricted between prozonite and metazonite on each segment, the brown at that level sometimes extending entirely across dorsum in a narrow band. Keels also yellow over caudo-lateral portion. Caudal tergite yellow. Head brown, with antennæ yellow. Lateral and ventral regions and legs yellow.

Collum with keel evenly bent down as in species of *Aphelidesmus*, its anterior corners rounded, the posterior corners subrectangular, narrowly rounded, not at all produced. Keels of the second tergite extending laterally a little beyond those of the collum. Posterior angles of the succeeding keels becoming gradually more produced in going caudad. Posterior keels less extended, as usual in *Aphelidesmus*, etc. Margin of keels in general wholly smooth. Anal tergite as shown on page 13, fig. 6.

The gonopods of the male have the coxæ well separated; between the coxæ posteriorly a median sternal plate which is widest across its anterior edge and is short antero-posteriorly. For details see page 13, figs. 7, 8.

Length of male holotype, about 43 mm.; greatest width, 7 mm. Length of female, 58 mm.; width, 10 mm.

*Locality*: Chitaria. One male (holotype) taken Sept. 6, 1929, and one female taken at same place Mar. 15, 1930.

## STRONGYLOSOMIDÆ

### 20. *Oxidus gracilis* (Koch)

*Fontaria gracilis* C. Koch, Syst.d. Myr., 1847, p. 142.

*Locality*: San José. A male and a female taken by M. Valerio.

This is now a tropicopolitan species also familiar in the hot-houses of temperate regions and hence sometimes spoken of as "the hothouse milliped." It was previously reported by the author from San José and is probably well established there.

## LEPTODESMIDÆ

### *Ethophallus* Chamberlin, new genus

A genus related to *Chondrodesmus* but differing especially in the more complicated gonopods. In these the coxæ of the two are firmly coalesced at the middle line; each coxa bearing on mesal side distally an uncate process the point of which extends into an excavation in base of the femur, the coxa also bearing a straight

subconical process above extending forward against outer side of base of femur; telopodite at right angle to coxa, the femur bearing a blade arising near base on mesal side and followed distally by a conspicuously expanded laminate portion and two acuminate processes. Legs with terminal segment long and slender, not supported beneath by a pad from metatarsus. Second keel on a level with the following ones. Tergites with transverse sulcus weak. Last tergite pointed. Repugnatorial pores on segments 5,7,9,10,12,13,15-19.

Genotype: *E. cervantes* Chamberlin, new species.

### 21. *Ethophallus cervantes* Chamberlin, n. sp.

General color above dark brown excepting the caudal processes of the keels and a band across caudal border of each metazonite where the color is yellow. Sides of body a lighter brown. Ventral region and the legs yellowish. Head dark brown above, in front below level of antennæ paler, the labral region yellow; antennæ brown proximally, the last two joints yellowish.

Collum with anterior and lateral margins together forming a semicircle, but with anterior median portion a little less convex; keels well developed, only moderately depressed; caudal margin somewhat arcuate, caudo-lateral angle a little extended and a little less than rectangular. Keels of succeeding tergites well developed, nearly horizontal; on segments behind the second caudal angles become successively more acute and more strongly produced, those of the most posterior segments long and slenderly acute. The metazonites a little depressed or weakly sulcate transversely a short distance behind the middle, smooth; anterior corners of keels rounded, the margin just behind each corner presenting a minute tooth as shown in the figures.

Anal tergite acutely narrowed to a narrowly truncate point caudally, the apical portion a little depressed, a transverse series of three or four setæ across base of depressed tip, one on each side projecting from a tubercle conspicuously caudo-laterad, and the tip also bearing four setæ from its caudal surface. Anal scale semicircular, bearing a conspicuous seta each side of middle, this seta arising from a submarginal tubercle. Anal valves narrowly margined along mesal edge, and each bearing two long submarginal setæ.

The characteristics of the male gonopods as shown in the accompanying figures.

Length of a male paratype, about 15 mm.; width, 2 mm.

*Locality*: Cervantes. Two complete males and the posterior portion of two other specimens taken June 30, 1928.

### 22. *Chondrodesmus falciphallus* Chamberlin, n. sp.

Dorsum a light chocolate brown with the keels and the distal part of anal tergite abruptly lighter; there is also a rather vague

trace of a lighter median longitudinal line. Legs and antennæ yellow.

Head smooth and shining.

Collum with posterior margin strongly bowed forward on each side; anterior margin straight over middle region and curving evenly about the anterior corner of the keel at each side, the caudal margin meeting the lateral in a slightly acute angle which is a little produced caudad; depressed transversely in a broad shallow furrow in front of the middle; narrowly margined all the way around. Surface of tergites in general moderately roughened, distinctly granulose, with the typical rows of small tubercles obsolete or nearly so. Anterior corners of keels well rounded, the posterior corners produced caudad in a short dentiform process; beginning with fourth keel the caudal margin presents a single submedian tooth or, on more posterior keels, two or three teeth as shown in the figures. Keels sharply margined, the edges smooth excepting for the caudal teeth and on porigerous keels a slight indentation in front of the pore body. Nineteenth segment and its keels greatly reduced.

Sternites with a low tuberculiform prominence at base of each leg. Anal sternite acutely produced between the two caudal setigerous tubercles.

Gonopods of the male as represented on page 15, fig. 3.

Length about 50 mm.; width 9 mm.

*Locality*: Parismina. One male taken Feb. 26, 1928.

This species is readily distinguishable from other species in the form of its gonopods; e.g., by the acutely prolonged apical portion of both blades of the telopodite.

### 23. *Chondrodesmus euliotus* Chamberlin, new species

Dorsum light chestnut, the keels, excepting at base, yellow and an obscure and partly discontinuous median longitudinal line also yellowish; sides light chestnut, the venter pale.

In size, coloration and general appearance suggesting *C. singularis* Chamberlin but differing in the characteristics of the keels. The fifth keel does not have its anterior corner shouldered out beyond the level of the porigerous prominence, and the posterior keels on caudal margin have a dentiform projection which is lacking in *singularis*. The details of form are as represented on page 15, figs. 4, 5. The metazonites smooth and shining excepting across caudal portion where weakly roughened; prozonites smooth.

Anal sternite triangularly produced between the setigerous tubercles, the caudal angle narrowly rounded.

Length about 30 mm.; width 4.8 mm.

*Locality*: Chitaria. Two females taken Mar. 14, 1931.

## RHACODESMIDÆ

## 24. ACERATOPHYLLUS UNICOLOR Carl

Carl, Rev. Suisse Zool., 1902, 10, p. 609, pl. 12, figs. 35, 36.

Brolemann, Ann. Soc. Ent. France, 1905, 74, p. 345, pl. 8, figs. 6, 7.

*Locality*: El Gallito. One male taken Feb. 1, 1929. The specimen is a somewhat smaller individual than Carl's type, having a width of 5 mm. as against 5.5 mm. The gonopods, however, correspond in detail.

## 25. ACERATOPHYLLUS LAMELLIFER Brolemann

*A. unicolor lamellifer* Brolemann, Bull. Soc. Ent. de France, 1905, p. 346, pl. 8, figs. 1-5.

*Localities*: Chitaria, one male taken Mar. 14, 1930; and Parismina, two females taken in 1929. Previously known from San José.

## RHINOCRICIDÆ

26. *Rhinocricus pygmoides* Chamberlin, n. sp.

Dark brown to blackish, the clypeal region lighter; legs fulvous.

Head smooth and shining. Sulcus continuous across vertex, interrupted in frontal region, more deeply impressed across clypeus. Antennæ with the usual four terminal sensory cones.

Collum narrowly margined about antero-ventral border; a horizontal stria at level of each eye extending from anterior margin nearly to middle of plate. Segments weakly constricted, the sulcus deeply impressed along anterior border of the depression and in front of level of pore, to embrace which it curves back abruptly. Each scobina consisting of a deeply impressed lunate pit at the margin of the tergite followed by a posteriorly pointed area of fine striæ; each pair of scobinæ separated by a distance of from once and a half to twice the length of a scobina; present caudad to about the thirty-fourth segment.

Anal tergite rounded behind; exceeded by the valves. Valves slightly compressed but not margined. Anal scale caudally rounded.

In the gonopods the lamellate division of the telopodite is narrowly clavate and distally a little narrowed, the style evenly curving away from the lamina on its mesal side. (See page 15, figs. 6, 7, 8.) Number of segments 45.

Width 3 mm.

*Locality*: Parismina. Several specimens, including one adult male (holotype), taken 26 Feb., 1928. Notably smaller than other Central American species with the exception of *R. ocraceus* Brolemann, of Panama. The latter species is separated at once by the presence on each anal valve of a caudal process. (Oxypyge?).

27. *Rhinocricus chitarianus* Chamberlin, n. sp.

Segments dark olive in front of the segmental sulcus and mostly also a little distance back of it, the segments behind each dark olive area deep red. Head and antennæ somewhat ferruginous as is also the collum excepting its dark anterior and posterior borders. Legs light olive brown. Anal tergite light olive with caudal border reddish, the anal valves similar, with mesal border reddish, the anal scale also light olive with caudal border reddish.

Head smooth and shining, the sulcus distinct but interrupted in the frontal region. Antennæ with sixth joint large and the last bearing the usual four cones.

Collum with a fine margining sulcus about the anterior corner; surface smooth and shining, but with some coriarius impressions, especially on each side at and below the level of the eye. Second tergite extending much below level of the collum, the lower end triangular, the sulcus fine and obscure dorsally. Sulci on the following segments complete, narrowly excurved opposite the pore. Tergite smooth and shining, striate only below.

Scobina obscure on eighth segment but distinctly developed from the ninth segment caudad; anterior impression deep, transversely elliptic, widely separated; the posterior striate area pointed behind.

Anal tergite bluntly rounded behind; much exceeded by the valves; two transverse shallow furrows between middle and caudal end. Anal sternite very wide, the caudal margin convex, differing in this conspicuously from *R. simulans*, a closely related species. (Page 15, fig. 9.)

Gonopods of the male somewhat resembling those of *R. simulans*, but the spine of the broader blade of telopodite longer and the blade itself differently formed, while the style is broader and distally less narrowed. See, further, page 17, fig. 1. Number of segments, 45.

Length 92 mm.; diameter at middle 11 mm.

*Locality*: Chitaria. One male taken Mar. 15, 1930.

## 28. RHINOCRICUS sp.

*Locality*: Chitaria. One female taken June 9, 1929. A very large specimen in poor condition which it seems difficult to place accurately in the absence of the male.

## SPIROSTREPTIDÆ

## 29. ORTHOPORUS ABSCONSUS Chamberlin

Proc. U. S. Nat. Mus., 1922, 60, Art. 8, p. 15.

*Locality*: San José. One female taken in 1929. Previously known from a male taken at Domingo de San Mateo.

## 30. ORTHOPORUS sp.

*Locality*: San José. One female of uncertain species taken June 1, 1929.

## 31. DIAPORUS OMALOPYGE (Brolemann)

*Spirostreptus* (*Scaphiostreptus*) *omalopyge* Brolemann, Ann. Soc. Ent. France, 1905, 74, p. 365, pl. 9, fig. 10.

*Diaporus omalopyge* Chamberlin, Proc. U. S. Nat. Mus. 1922, 60, Art. 8, p. 19.

*Locality*: El Gallito. Two females, apparently this species, taken in 1929. Previously known from La Palma, Carillo and Caché.

## 32. DIAPORUS sp.

*Locality*: Cervantes. One female of uncertain species taken June 30, 1928.

## SIPHONOPHORIDÆ

33. *Siphonophora valerii* Chamberlin, n. sp.

Dark brown with the head typically lighter, yellow; antennæ and legs also yellowish.

Head narrow, widest at base and narrowing continuously to the beak which it about equals in length. The beak slenderly pointed, slightly curved, exceeded by the antennæ but reaching beyond middle of sixth article of the latter. Antennæ heavy and conspicuously clavately thickened from the base distad. (See page 17, fig. 2.)

Collum widely angularly excised in front; sides converging forward. Pleurites of anterior and posterior regions as shown on page 17, figs. 3, 4. Number of segments, 82-83.

Length about 20-22 mm.; width 1.3 mm.

*Locality*: Pavas. Three females taken June 1, 1929.

## EDITORIAL NOTICE

Beginning with this issue the volumes of the Pan-Pacific Entomologist will run concurrently with the calendar year. It is hoped that the convenience for bibliographical purposes of this change in dating will in a measure recompense our subscribers for the long interval between the last issues. Those subscribers who have paid for the calendar year 1932 will be credited with six months' subscription on volume nine for 1933. Our treasurer has obtained more favorable terms for printing which, with the loyal support of our subscribers, should make it possible for this journal to appear regularly and promptly in the future.—  
E. P. Van Duzee.